

## ecology and environment, inc.

International Specialists in the Environment

33 North Dearborn Street Chicago, Illinois 60602

Tel. 312/578-9243, Fax: 312/578-9345

MEMORANDUM

DATE:

June 23, 1997

TO:

Damon Sinars, START Project Manager, E & E, Chicago,

Illinois

FROM:

Lisa Graczyk, START Chemist, E & E, Chicago, Illinois

THROUGH:

Dave Hendren, START Analytical Services Manager,

E & E, Chicago, Illinois

SUBJECT:

Data Quality Review for Polynuclear Aromatic Hydrocarbons (PAH), Sauget Area One, Sauget, St.

Clair County, Illinois

REFERENCE:

Project TDD S05-9703-012 Analytical TDD S05-9704-806

Project PAN 7M1201SIXX

Analytical PAN 7AAF01TAXX

The data quality assurance (QA) review of five sediment samples collected from the Sauget Area One site is complete. The samples were collected on April 18, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana, for analyses. The laboratory analyses were performed according to the following United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods: 3540 for extraction; and 8270 for PAH analysis.

#### Sample Identification

START	Laboratory
Identification No.	Identification No.
F101	042083
F102	042084
F105	042087
F106	042088
F107	042089

Sauget Area One Project TDD S05-9703-012 Analytical TDD S05-9704-806 PAH Page 2

#### Data Qualifications:

#### I. <u>Sample Holding Time: Acceptable</u>

The samples were collected on April 18, 1997. The samples were extracted on April 23, 1997 and analyzed on April 24, 1997. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

# II. <u>Gas Chromatography/Mass Spectrometry (GC/MS) Tuning:</u> <u>Acceptable</u>

GC/MS tuning to meet ion abundance criteria using decaflurotriphenylphosphine (DFTPP) was acceptable and samples were analyzed within 12 hours of DFTPP tuning.

#### III. Calibrations:

#### • Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. All target compounds had relative response factors of at least 0.05. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all target compounds.

## • Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for target compounds.

#### IV. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds were detected in the blank.

#### V. Internal Standards: Acceptable

The areas of the internal standards in the samples were within -50% to +100% of the associated calibration check standards. The retention times of the internal standards were within the 30-second control limit.

#### VI. Compound Identification: Acceptable

The mass spectra and retention times of the detected compounds in the samples matched those of the standards.

Sauget Area One Project TDD S05-9703-012 Analytical TDD S05-9704-806 PAH Page 3

### VII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 4.0, BNAs by GC/MS Analysis. Based upon the information provided, the data are acceptable for use.



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#### MEMORANDUM

DATE:

June 23, 1997

TO:

Damon Sinars, START Project Manager, E & E, Chicago,

Illinois

FROM:

Lisa Graczyk, START Chemist, E & E, Chicago, Illinois

THROUGH:

Dave Hendren, START Analytical Services Manager,

E & E, Chicago, Illinois

SUBJECT:

Data Quality Review for Polychlorinated Biphenyls (PCBs) and Pesticides, Sauget Area One, Sauget, St.

Clair County, Illinois

REFERENCE: Project TDD S05-9703-012 Analytical TDD S05-9704-806

Project PAN 7M1201SIXX

Analytical PAN 7AAF01TAXX

The data quality assurance (QA) review of nine sediment samples collected from the Sauget Area One site is complete. The samples were collected on April 18, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to EIS Analytical Services, Inc, South Bend, Indiana, for analyses. laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 3540B for extraction and 8081 for PCB/Pesticide analysis.

#### Sample Identification

START Identification No.	Laboratory Identification No.	<u>Parameter</u>
F101	042083	PCBs
F102	042084	PCB/Pesticides
F103	042085	PCB/Pesticides
F104	042086	PCB/Pesticides
F105	042087	PCBs
F106	042088	PCBs
F107	042089	PCB/Pesticides
F108	042090	PCBs
F109	042091	PCBs

Sauget Area One Project TDD S05-9703-012 Analytical TDD S05-9704-806 PCB/Pesticides Page 2

#### Data Qualifications:

#### I. <u>Sample Holding Time: Acceptable</u>

The samples were collected on April 18, 1997, extracted on April 24, 1997, and analyzed on April 25 and 26, 1997. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

#### II. <u>Instrument Performance: Acceptable</u>

The chromatographic resolution was adequate in the standard and sample chromatograms. DDT retention time was greater than 12 minutes in the standard chromatograms. Retention time windows were reported and standards were in the established windows. Surrogate retention times were consistent in the samples and standards.

#### III. <u>Calibrations:</u>

#### • Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. The percent relative standard deviations (%RSD) of calibration factors in the initial linearity check were less than 20%.

#### • Continuing Calibration: Acceptable

The percent differences of the response factors were less than 15% for detected compounds.

#### IV. <u>Blank: Acceptable</u>

A method blank was analyzed with the sample. No target compounds or contaminants were detected in the blank.

#### V. <u>Compound Identification: Acceptable</u>

Detected PCBs in the samples appeared to match the "fingerprint" pattern of the standard chromatograms and were confirmed on a second GC column.

Sauget Area One Project TDD S05-9703-012 Analytical TDD S05-9704-806 PCB/Pesticides Page 3

## VI. Additional QC Checks: Acceptable

The surrogate recoveries were within the control limits established by the laboratory.

#### VII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 6.0, Pesticides/PCBs. Based upon the information provided, the data are acceptable for use.



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MEMORANDUM

DATE:

June 23, 1997

TO:

Damon Sinars, START Project Manager, E & E, Chicago,

Illinois

FROM:

Lisa Graczyk, START Chemist, E & E, Chicago, Illinois

THROUGH:

Dave Hendren, START Analytical Services Manager,

E & E, Chicago, Illinois

SUBJECT:

Inorganic Data Quality Review for Resource

Conservation and Recovery Act (RCRA) Metals, Sauget

Area One, Sauget, St. Clair County, Illinois

REFERENCE:

Project TDD S05-9703-012 Analytical TDD S05-9704-806

Project PAN 7M1201SIXX Analytical PAN 7AAF01TAXX

The data quality assurance (QA) review of nine sediment samples collected from the Sauget Area One site is complete. The samples were collected on April 18, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana, for analyses. The laboratory analyses were performed according to U.S. EPA solid Waste 846 Methods: 3005A for sample digestion; 6010 for arsenic, barium, cadmium, chromium, lead, selenium, and silver; and 7471 for mercury.

#### Sample Identification

START  Identification No.	Laboratory <u>Identification No.</u>
F101	042083
F102	042084
F103	042085
F104	042086
F105	042087
F106	042088
F107	042089
F108	042090
F109	042091

Sauget Area One Project TDD S05-9703-012 Analytical TDD S05-9704-806 RCRA Metals Page 2

#### Data Qualifications:

#### I. Sample Holding Time: Acceptable

The samples were collected on April 18, 1997, and analyzed between April 28 and May 1, 1997. This is within the six month holding time limit (28 days for mercury).

#### II. <u>Calibration:</u>

#### • Initial Calibration: Qualified

Recoveries for the initial calibration verification were within 90 to 110% for analytes other than mercury, as required. Recoveries for mercury were not within the established limits of 80% to 120%. All positive results for mercury were flagged as "J" or estimated, as required.

#### • Continuing Calibration: Qualified

All analytes included in the continuing calibration verification standard were within 90 to 110% other than mercury, as required. The recovery for mercury was 77.5% wich is outside the control limits of 80% to 120%. All positive results for mercury were flagged as "J" or estimated, as required.

#### III. <u>Blanks: Acceptable</u>

Calibration and preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blanks. At least one blank was analyzed for each 20 samples.

#### IV. Interference Check Samples (ICSs): Acceptable

ICSs were analyzed and recoveries were acceptable.

#### V. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use.

Sauget Area One Project TDD S05-9703-012 Analytical TDD S05-9704-806 RCRA Metals Page 3

## Data Qualifiers and Definitions:

J - The associated numerical value is an estimated quantity because the reported concentrations were less than the required detection limits or quality control criteria were not met.



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33 North Dearborn Street Chicago, Illinois 60602

Tel. 312/578-9243, Fax: 312/578-9345

#### MEMORANDUM

DATE:

June 20, 1997

TO:

Damon Sinars, START Project Manager, E & E, Chicago,

Illinois

FROM:

Lisa Graczyk, START Chemist, E & E, Chicago, Illinois

THROUGH:

Dave Hendren, START Analytical Services Manager,

E & E, Chicago, Illinois

SUBJECT:

Miscellaneous Data Quality Review for Total Organic

Carbon (TOC), Sauget Area One, Sauget, St. Clair

County, Illinois

REFERENCE:

Project TDD S05-9703-012 Analytical TDD S05-9704-806

Project PAN 7M1201SIXX Analytical PAN 7AAF01TAXX

Protection Agency (U.S. EPA) Solid Waste 846 method 9060 which

The data quality assurance (QA) review of three sediment samples collected from the Sauget Area One site is complete. The samples were collected on April 18, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana. The laboratory analyses were performed according to United States Environmental

was modified for sediment analysis.

#### Sample Identification

START	Laboratory
Identification No.	Identification No.
F102	042084
F103	042085
F104	042086

Sauget Area One Project TDD S05-9703-012 Analytical TDD S05-9704-806 TOC Page 2

#### Data Qualifications:

#### I. Sample Holding Time: Acceptable

The samples were collected on April 18, 1997 and analyzed on April 25, 1997. The Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) and SW846 method 9060 do not provide a holding time for TOC in sediments.

#### II. <u>Calibrations: Acceptable</u>

Method 9060 states to follow the instrument manufacturer's instructions on calibrating the instrument. No control limits are mentioned. The laboratory analyzed an initial calibration verification standard both before and after the analysis. The percent differences between true and received results were 3% and 5% respectively. This is acceptable.

### III. Blanks: Acceptable

A blank was analyzed both before and after the analysis. No contaminants were found in the blank.

### IV. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in Data Validation Procedures, Section 9.0, Generic Data Validation Procedures as stated in OSWER Directive 9360.4-01 (April 1990). Based upon the information provided, the data are acceptable for use.



Mr David Hendren

Ecology & Environment, Inc.

33 North Dearborn, Suite 900

Chicago, IL 60602

Tel No: 312-578-9243

Fax No: 312-578-9345

PO No:

Project Name: Sauget Area

Report Date:

5/22/97

EIS Order No:

970400209

EIS Sample No:

042083

EIS Project No:

2009-1000-97

Client Sample ID:

F101

Date Collected:

4/18/97

Date Received:

4/22/97

Collected By:

**DMS** 

This report presents results of analysis for your sample(s) received under our Order No above. This Number is to be used in all inquiries concerning this report. The EIS Sample No above, as well as your Sample ID, refer to the first sample in a multi-sample submission

#### **DEFINITIONS:**

MDL = Method Detection Limit normally achieved in the absence of interferences or other matrix difficulties.

SDL = Sample Detection Limit achieved in your sample. If numerically greater than the MDL, dilutions were required in order to perform the analysis. If numerically less than the MDL, alternate techniques were employed.

CHAIN-OF-CUSTODY is enclosed if received with your sample submission.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

The data in this report has been reviewed and complies with EIS Quality Control unless specifically addressed above.

**EIS Analytical Services Inc** 

1701 N. Ironwood Drive, Suite B \* South Bend, IN 46635 \* Tel: 219-277-0707 \* Fax: 219-273-5699

Page 2 of 31

CLIENT SAMPLE ID: F101

**Date Collected:** 

4/18/97

Date Received:

4/22/97

Report Date:

5/22/97 EIS Sample No: 042083

						Test		
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method	
Arsenic,Total	232	mg/kg(wet)	5	5	ClearN	5/1/97	6010	
Barium, Total	145	mg/kg(wet)	1	1	ClearN	4/28/97	6010	
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010	
Chromium, Total	44.2	mg/kg(wet)	1	1	ClearN	4/28/97	6010	
Lead,Total	41.2	mg/kg(wet)	5	5	ClearN	4/28/97	6010	
Mercury, Total	<0.1	mg/kg(wet)	0.1	0.2	ShaneD	4/30/97	7471	
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010	
Silver, Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010	

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**CLIENT SAMPLE ID:** F101

**Date Collected:** 

4/18/97

**Date Received:** 

**Pyrene** 

4/22/97

Report Date:

5/22/97

4/24/97

8270 B

EIS Sample No: 042083 970400209 **EIS Order No:** 

		<del> </del>					
Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)anthracene	nd	ma/ka(wet)	0.5	0.5	DavisW	4/24/97	8270 B

mg/kg(wet)

0.5

nd

0.5

DavisW

Page 4 of 31

CLIENT SAMPLE ID: F101

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042083

_				7 (		Test	l ,
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	KiepperW	4/25/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081

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**CLIENT SAMPLE ID:** F102

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042084

EIS Order No: 970400209

Test Parameter Units SDL MDL Results Analyst Date Method Total Organic Carbon (TOC) 26600 5 BaunG 4/28/97 9060 M mg/kg(wet)

Page 6 of 31

CLIENT SAMPLE ID: F102

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042084

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic, Total	187	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium, Total	162	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	4.56	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium, Total	29.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	199	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	0.24ブ	mg/kg(wet)	0.1	0.2	ShaneD	4/30/97	7471
Selenium, Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver, Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

Page 7 of 31

CLIENT SAMPLE ID: F102

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042084 EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method	
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(a)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(a)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(b)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(ghi)perylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(k)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Chrysene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Fluorene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Indeno(1,2,3-cd)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Naphthalene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Phenanthrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	<b>82</b> 70 B	
Pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	

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CLIENT SAMPLE ID: F102

**Date Collected:** 

4/18/97

Date Received:

4/22/97

Report Date:

5/22/97

EIS Sample No: 042084

EIS Order No:

970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1221)	nd	mg/kg(wet)	1	0.2	CarmichaelJ	4/26/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1254)	2.1	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.5	0.1	CarmichaelJ	4/26/97	8081

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**CLIENT SAMPLE ID:** F102

**Date Collected:** 

4/18/97

Date Received:

4/22/97

Report Date:

5/22/97

EIS Sample No: 042084 EIS Order No: 970400209

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Aldrin	nd nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(alpha)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(gamma)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Dieldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan I	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan II	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan sulfate	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin aldehyde	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin ketone	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Heptachlor	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (alpha-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (beta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (delta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (gamma-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Methoxychlor	nd	mg/kg(wet)	0.25	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDD	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDE	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDT	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Toxaphene	nd	mg/kg(wet)	2.5	0.2	CarmichaelJ	4/26/97	8081

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CLIENT SAMPLE ID: F103

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042085

**EIS Order No:** 970400209

Test SDL MDL Parameter Results Units Analyst Date Method Total Organic Carbon (TOC) 5 16900 5 BaunG 4/28/97 9060 M mg/kg(wet)

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5/22/97

CLIENT SAMPLE ID: F103

4/18/97

Report Date: EIS Sample No: 042085

Date Collected:	4/18/97
Date Received:	4/22/97

						Test	İ
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method
Arsenic,Total	213	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	179	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	8.29	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium,Total	43.8	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	111	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	0.30	mg/kg(wet)	0.1	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

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CLIENT SAMPLE ID: F103

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Order No:

EIS Sample No: 042085 970400209

	·					Test	
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	CarmichaelJ	4/26/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1254)	0.50	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081

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CLIENT SAMPLE ID: F103

Date Collected:

4/18/97

Date Received:

4/22/97

**Report Date:** 5/22/97 **EIS Sample No:** 042085

					_	Test	
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method
Aldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(alpha)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(gamma)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Dieldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan I	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan II	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan sulfate	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin aldehyde	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin ketone	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Heptachlor	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (alpha-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (beta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (delta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (gamma-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Methoxychlor	nd	mg/kg(wet)	0.25	0.005	CarmichaeU	4/26/97	8081
P,P'-DDD	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDE	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDT	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Toxaphene	nd	mg/kg(wet)	2.5	0.2	CarmichaelJ	4/26/97	8081

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CLIENT SAMPLE ID: F104

**Date Collected:** 

4/18/97

**Date Received:** 4/22/97 Report Date:

5/22/97 EIS Sample No: 042086

EIS Order No:

970400209

Parameter

Results

Units

SDL

MDL

Analyst

Test Date

Method

Total Organic Carbon (TOC)

17600

mg/kg(wet)

BaunG

4/28/97

9060 M

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CLIENT SAMPLE ID: F104

**Date Collected: Date Received:**  4/18/97

4/22/97

Report Date:

5/22/97

EIS Sample No: 042086 EIS Order No:

970400209

					Test	
Results	Units	SDL	MDL	Analyst	Date	Method
276	mg/kg(wet)	5	5	ClearN	5/1/97	6010
228	· mg/kg(wet)	1	1	ClearN	4/28/97	6010
16.3	mg/kg(wet)	1	1	ClearN	4/28/97	6010
27.2	mg/kg(wet)	1	1	ClearN	4/28/97	6010
124	mg/kg(wet)	5	5	ClearN	4/28/97	6010
0.55ブ	mg/kg(wet)	0.11	0.2	ShaneD	4/30/97	7471
<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
	276 228 16.3 27.2 124 0.55 3 <5.0	276 mg/kg(wet) 228 mg/kg(wet) 16.3 mg/kg(wet) 27.2 mg/kg(wet) 124 mg/kg(wet) 0.55 mg/kg(wet) <5.0 mg/kg(wet)	276 mg/kg(wet) 5  228 mg/kg(wet) 1  16.3 mg/kg(wet) 1  27.2 mg/kg(wet) 1  124 mg/kg(wet) 5  0.55 mg/kg(wet) 0.11  <5.0 mg/kg(wet) 5	276 mg/kg(wet) 5 5 228 mg/kg(wet) 1 1 16.3 mg/kg(wet) 1 1 27.2 mg/kg(wet) 1 1 124 mg/kg(wet) 5 5 0.55  mg/kg(wet) 0.11 0.2 <5.0 mg/kg(wet) 5 5	276 mg/kg(wet) 5 5 ClearN  228 mg/kg(wet) 1 1 ClearN  16.3 mg/kg(wet) 1 1 ClearN  27.2 mg/kg(wet) 1 1 ClearN  124 mg/kg(wet) 5 5 ClearN  0.55 mg/kg(wet) 0.11 0.2 ShaneD  <5.0 mg/kg(wet) 5 5 ClearN	Results         Units         SDL         MDL         Analyst         Date           276         mg/kg(wet)         5         5         ClearN         5/1/97           228         mg/kg(wet)         1         1         ClearN         4/28/97           16.3         mg/kg(wet)         1         1         ClearN         4/28/97           27.2         mg/kg(wet)         1         1         ClearN         4/28/97           124         mg/kg(wet)         5         5         ClearN         4/28/97           0.55⊅         mg/kg(wet)         0.11         0.2         ShaneD         4/30/97           <5.0

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CLIENT SAMPLE ID: F104

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042086

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	CarmichaelJ	4/26/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1254)	0.52	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081

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CLIENT SAMPLE ID: F104

**Date Collected:** 

4/18/97

**Date Received:** 

P,P'-DDD

P,P'-DDE

P,P'-DDT

Toxaphene

4/22/97

Report Date:

5/22/97

EIS Sample No: 042086 EIS Order No:

970400209

						Test	
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method
Aldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(alpha)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Chlordane(gamma)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Dieldrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan i	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan II	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endosulfan sulfate	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin aldehyde	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Endrin ketone	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Heptachlor	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (alpha-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (beta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (delta-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (gamma-BHC)	nd	mg/kg(wet)	0.05	0.005	CarmichaelJ	4/26/97	8081
Methoxychlor	nd	mg/kg(wet)	0.25	0.005	CarmichaelJ	4/26/97	8081

mg/kg(wet)

mg/kg(wet)

mg/kg(wet)

mg/kg(wet)

nd

nd

nd

nd

0.05

0.05

0.05

2.5

0.005

0.005

0.005

0.2

CarmichaelJ

CarmichaelJ

CarmichaelJ

CarmichaelJ

4/26/97

4/26/97

4/26/97

4/26/97

8081

8081

8081

8081

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**CLIENT SAMPLE ID:** F105

**Date Collected: Date Received:** 

4/18/97 4/22/97 Report Date:

5/22/97 EIS Sample No: 042087

						Test	1	
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method	
Arsenic, Total	166	mg/kg(wet)	5	5	ClearN	5/1/97	6010	
Barium, Total	116	mg/kg(wet)	1	1	ClearN	4/28/97	6010	
Cadmium, Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010	
Chromium,Total	12.6	mg/kg(wet)	1	1	ClearN	4/28/97	6010	
Lead,Total	56.2	mg/kg(wet)	5	5	ClearN	4/28/97	6010	
Mercury,Total	<0.12	mg/kg(wet)	0.12	0.2	ShaneD	4/30/97	7471	
Selenium, Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010	
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010	

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CLIENT SAMPLE ID: F105

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042087

EIS Order No:

970400209

			<del></del>			Test	•
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(a)pyrene	. nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	<b>8270</b> B
Benzo(b)fluoranthene	0.63	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(ghi)perylene	0.52	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Benzo(k)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Chrysene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluoranthene	0.62	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Fluorene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Indeno(1,2,3-cd)pyrene	0.50	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Naphthalene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Phenanthrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B
Pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B

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**CLIENT SAMPLE ID:** F105

**Date Collected:** 

Date Received:

4/18/97

4/22/97

Report Date:

5/22/97

EIS Sample No: 042087

						Test	
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081

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CLIENT SAMPLE ID: F106

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042088

						Test	
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method
Arsenic,Total	160	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	133	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium, Total	12.1	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	28.3	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	<0.13	mg/kg(wet)	0.13	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

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**CLIENT SAMPLE ID:** F106

**Date Collected:** 

4/18/97

Date Received:

4/22/97

Report Date:

5/22/97

EIS Sample No: 042088

						T	est	
Parameter	Results	Units	SDL	MDL	Analyst	D	ate	Method
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/	24/97	8270 B
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/	24/97	8270 B
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/	24/97	8270 B
Benzo(a)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/	24/97	8270 B
Benzo(a)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/	24/97	8270 B
Benzo(b)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/	24/97	8270 B
Benzo(ghi)perylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4	24/97	8270 B
Benzo(k)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4	24/97	8270 B
Chrysene	nd	mg/kg(wet)	0.5	0.5	DavisW	4	24/97	8270 B
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4.	24/97	8270 B
Fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4	24/97	8270 B
Fluorene	nd	mg/kg(wet)	0.5	0.5	DavisW	4	24/97	8270 B
Indeno(1,2,3-cd)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4	24/97	8270 B
Naphthalene	nd	mg/kg(wet)	0.5	0.5	DavisW	4	24/97	8270 B
Phenanthrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4.	24/97	8270 B
Pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4.	24/97	8270 B

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CLIENT SAMPLE ID: F106

**Date Collected:** 

4/18/97

Date Received:

4/22/97

Report Date:

5/22/97

EIS Sample No: 042088 EIS Order No: 970400209

						Test		
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method	
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081	
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	

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CLIENT SAMPLE ID: F107

**Date Collected:** 

4/18/97

**Date Received:** 4/22/97 Report Date:

5/22/97

EIS Sample No: 042089

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Arsenic,Total	144	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium, Total	137	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium, Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium, Total	10.4	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	28.2	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	<0.13	mg/kg(wet)	0.13	0.2	ShaneD	4/30/97	7471
Selenium, Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

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CLIENT SAMPLE ID: F107

**Date Collected: Date Received:** 

4/18/97

4/22/97

Report Date:

5/22/97

EIS Order No:

EIS Sample No: 042089 970400209

						Test	ì	
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method	
Acenaphthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Acenaphthylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(a)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(a)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(b)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(ghi)perylene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Benzo(k)fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Chrysene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Fluoranthene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Fluorene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Indeno(1,2,3-cd)pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Naphthalene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Phenanthrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	
Pyrene	nd	mg/kg(wet)	0.5	0.5	DavisW	4/24/97	8270 B	

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CLIENT SAMPLE ID: F107

**Date Collected:** Date Received:

4/18/97 4/22/97 Report Date:

5/22/97

EIS Sample No: 042089 EIS Order No: 970400209

						Test		
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method	
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081	
PCB (AR1221)	nđ	mg/kg(wet)	0.2	0.2	CarmichaelJ	4/26/97	8081	
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081	
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081	
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081	
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081	
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	CarmichaelJ	4/26/97	8081	

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CLIENT SAMPLE ID: F107

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042089

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Aldrin	nd nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Chlordane(alpha)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
				0.005	CarmichaelJ	4/26/97	8081
Chlordane(gamma)	nd d	mg/kg(wet)	0.005	*			
Dieldrin	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endosulfan I	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endosulfan II	nd	mg/kg(wet)	0.005	0.005	CarmichaeU	4/26/97	8081
Endosulfan sulfate	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ ·	4/26/97	8081
Endrin	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endrin aldehyde	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Endrin ketone	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Heptachlor	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (alpha-BHC)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (beta-BHC)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Hexachlorocyclohexane (delta-BHC)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
-lexachlorocyclohexane (gamma-BHC)	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Methoxychlor	nd	mg/kg(wet)	0.02	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDD	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDE	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
P,P'-DDT	nd	mg/kg(wet)	0.005	0.005	CarmichaelJ	4/26/97	8081
Toxaphene	nd	mg/kg(wet)	0.2	0.2	CarmichaelJ	4/26/97	8081

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CLIENT SAMPLE ID: F108

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042090

EIS Order No:

970400209

Parameter						Test	
	Results	Units	SDL	MDL	Analyst	Date	Method
Arsenic, Total	199	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	138	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium, Total	14.9	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	45.7	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	0.12ブ	mg/kg(wet)	0.11	0.2	ShaneD	4/30/97	7471
Selenium,Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

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**CLIENT SAMPLE ID:** F108

Date Collected:

4/18/97

Date Received:

4/22/97

Report Date:

5/22/97

EIS Sample No: 042090

						Test		
Parameter	Results	Units	SDL	MDL	Analyst	Date	Method	
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081	
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1254)	. nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081	

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CLIENT SAMPLE ID: F109

**Date Collected:** 

4/18/97

Date Received:

4/22/97

Report Date:

5/22/97

EIS Sample No: 042091

Parameter						Test	
	Results	Units	SDL	MDL	Analyst	Date	Method
Arsenic,Total	160	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Barium,Total	163	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Cadmium,Total	<1.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Chromium, Total	13.9	mg/kg(wet)	1	1	ClearN	4/28/97	6010
Lead,Total	50.2	mg/kg(wet)	5	5	ClearN	4/28/97	6010
Mercury,Total	0.11 <b>J</b>	mg/kg(wet)	0.11	0.2	ShaneD	4/30/97	7471
Selenium, Total	<5.0	mg/kg(wet)	5	5	ClearN	5/1/97	6010
Silver,Total	<2.0	mg/kg(wet)	1	1	ClearN	4/28/97	6010

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**CLIENT SAMPLE ID:** F109

**Date Collected:** 

4/18/97

**Date Received:** 

4/22/97

Report Date:

5/22/97

EIS Sample No: 042091 EIS Order No:

970400209

Parameter						Test	
	Results	Units	SDL	MDL	Analyst	Date	Method
PCB (AR1016)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1221)	nd	mg/kg(wet)	0.2	0.2	KlepperW	4/25/97	8081
PCB (AR1232)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1242)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1248)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1254)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081
PCB (AR1260)	nd	mg/kg(wet)	0.1	0.1	KlepperW	4/25/97	8081